

In the Claims:

1. (Currently Amended) A method of providing service level management in a network, wherein a service associated with the network is composed of one or more network components and the service affects operation of a business operation related the to network, the method comprising:

collecting data on component parameters for the one or more network components, each of the component parameters having a state;

selecting one or more component parameters from the component parameters ~~as a service parameter~~; and

declaring the selected one or more component parameters a service parameter, each of the service parameters having a state representative of the service; and

utilizing algorithms to determine determining how a the one or more service parameters is influenced by the other component parameters to provide service level management in the network.

2. (Currently Amended) The method of claim 1, wherein the step of determining further comprises the step of, representing how the one or more service parameters is influenced by the other component parameters ~~determined influence is represented~~ in one or more of:

- a decision tree;
- a propositional statement;
- a quantified statement;
- a weighted listing; and
- a graph.

3. (Currently Amended) The method of claim 1, wherein the step of determining algorithms include ~~comprises~~ one or more processes to determine how the one or more service parameters is influenced by the other component parameters to provide service level management including:

- a data mining based process;

a neural network based process;
a machine learning based process;
an IDS derivative (iterative dichotomizing third) based process;
an genetic algorithm based process; and
a classical selected statistical based process methods.

Claims 4 and 5 are cancelled.

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6. (Currently Amended) The method of claim 1, wherein the state representative of the service associated with the selected one or more service parameters represents at least one of, ~~is selected from the group consisting of~~

- a response time of a network resource;
- traffic congestion of a selected portion of the network;
- availability of a network resource;
- reliability of a network resource;
- security of a network resource;
- performance of a network resource; and
- configuration of a network resource.

7. (New) The method of claim 1, wherein the one or more network components is associated with a network component monitoring agent of a network management system.

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8. (New) The method of claim 7, wherein the step of determining interfaces with the network component monitoring agent to provide service level management in the network.

9. (New) A method of implementing service level management in a network having one or more network entities addressable by the network to manage a service associated with the network, the method comprising the steps of,

- identifying a plurality of component parameters associated with the one or more network entities;

designating one of the plurality of component parameters a service parameter, the service parameter providing an indication of a state of the service associated with the network; and

using the service parameter to implement service level management in the network to manage the service associated with the network.

10. (New) The method of claim 9, further comprising the steps of,
storing the plurality of component parameters associated with the one or more network entities in a storage device; and
taking an action using the stored component parameters to determine how the plurality of component parameters affect the service parameter to manage the service associated with the network.

C² 11. (New) The method of claim 9, further comprising the step of managing the network based on the state of the service indicated by the service parameter.

12. (New) The method of claim 9, further comprising the step of instructing the one or more network entities addressable by the network to take an action based on the state of the service indicated by the service parameter.

13. (New) The method of claim 12, further comprising the step of interfacing with another management platform associated with the network to manage the service associated with the network.

14. (New) A device readable medium holding device executable instructions for executing a method of providing service level management in a network, wherein a service associated with the network is composed of one or more network components and the service affects operation of a business operation related the to network, the method comprising the steps of:

collecting data on component parameters for the one or more network components, each of the component parameters having a state;

selecting one or more component parameters from the component parameters;

declaring the selected one or more component parameters service parameters, each of the service parameters having a state representative of the service; and

determining how the service parameters are influenced by the other component parameters to provide service level management of the network.

15. (New) The medium of claim 14, wherein the step of determining further comprises the step of, representing how the service parameters are influenced by the other component parameters in one or more of:

- a decision tree;
- a propositional statement;
- a quantified statement;
- a weighted listing; and
- a graph.

16. (New) The medium of claim 14, wherein the step of determining comprises one or more processes to determine how the service parameters are influenced by the other component parameters to provide service level management including:

- a data mining based process;
- a neural network based process;
- a machine learning based process;
- an IDS derivative (iterative dichotomizing third) based process;
- an algorithm based process; and
- a selected statistical based process.

17. (New) The medium of claim 14, wherein the state representative of the service associated with the selected one or more service parameters represents at least one of,

- a response time of a network resource;
- traffic congestion of a selected portion of the network;

availability of a network resource;
reliability of a network resource;
security of a network resource;
performance of a network resource; and
configuration of a network resource.

18. (New) The medium of claim 14, wherein the one or more network components is associated with a network component monitoring agent of a network management system.

19. (New) The medium of claim 18, wherein the step of determining interfaces with the network component monitoring agent to provide service level management in the network.

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20. (New) A device readable medium holding device executable instructions for executing a method of implementing service level management in a network having one or more network entities addressable by the network to manage a service associated with the network, the method comprising the steps of,

- identifying a plurality of component parameters associated with the one or more network entities;
- designating one of the plurality of component parameters a service parameter, the service parameter providing an indication of a state of the service associated with the network; and
- using the service parameter to implement service level management in the network to manage the service associated with the network.

21. (New) The medium of claim 20, further comprising the steps of,

- storing the plurality of component parameters associated with the one or more network entities in a storage device; and

taking an action using the stored component parameters to determine how the plurality of component parameters affects the service parameter to manage the service associated with the network.

22. (New) The medium of claim 20, further comprising the step of managing the network based on the state of the service indicated by the service parameter.

23. (New) The medium of claim 20, further comprising the step of instructing the one or more network entities addressable by the network to take an action based on the state of the service indicated by the service parameter.

24. (New) The medium of claim 23, further comprising the step of interfacing with another management platform associated with the network to manage the service associated with the network.
